

REMARKS

Claims 1-18 and 20-23 are in the application. Claims 1, 4, and 20 are in independent form. Claims 24-26 are canceled without prejudice.

Claims 1-2, 4, 8, 12, and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Houston (6,043,535).

Houston describes a system with "a self-aligned implant region 126 ... formed within back gate 136 inwardly from and in approximate vertical alignment with front gate 116." (Col. 4, lines 36-39.) Houston does not state that region 126 terminates electric fields. Indeed, region 126 is part of a back gate 136 which works in connection with gate 116. However, even if region 126 can be considered an electric field terminal region, which applicants do not concede, it does not extend beneath the source and drain. Rather, it is aligned with gate 116.

Likewise, Houston says nothing about regions 137 acting as electric field terminal regions. In fact, Houston, col. 6, lines 53-55, states: "Regions 137 of back gate 136 may be lightly doped oppositely to the doping of self-aligned implant region 126 such that regions 137 will be depleted." (Emphasis added.)

Accordingly, the rejection should be withdrawn. However, to further clarify what is claimed, claims 1 and 4 are amended to recite:

"wherein all portions of the electric field terminal region have the same material type, that is either all portions are p-type or all portions are n-type."

Houston neither discloses nor teaches an electric field terminal region that extends partially under the source and drain and that is either all p-type or all n-type. Accordingly, the rejections of claims 1 and 4 should be withdrawn. The rejections of dependent claims 2, 8, 12, and 15-18 should be withdrawn for at least the same reason.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houston in view of Ayres et al. (US 5,684,318). Claim 3, which depends on claim 1, and claim 5, which depends on claim 4, state: "the body is undoped." Ayres et al. is introduced merely to teach an undoped body. The combination of Houston and Ayres et al. does not teach the limitations of claims 1 and 4. Accordingly, the rejection of claims 3 and 5 should be withdrawn for at least the same reason as for claims 1 and 4.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Houston in view of

Hwang (US 5,359,219). Claim 6, which is dependent on claim 4, states: "the body is lightly doped." Hwang is introduced merely to teach a lightly doped body. The combination of Houston and Hwang does not teach the limitations of claim 4. Accordingly, the rejection of claim 6 should be withdrawn for at least the same reason as for claim 4.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Houston in view of Pfister (US 5,426,315). Claim 7, which is dependent on claim 4, states: "wherein a channel is formed in the body between the source and drain when certain voltages are applied to the source, gate, and drain, and the channel is undoped." Pfister is introduced merely to teach an undoped channel. The combination of Houston and Pfister does not teach the limitations of claim 4. Accordingly, the rejection of claim 7 should be withdrawn for at least the same reason as for claim 4.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houston in view of Burr (US 6,249,027). Claims 9 and 10 are dependent on claim 4. Claim 9 states: "the body floats" and claim 10 states "the body is biased." Burr is introduced merely to teach a floating body (but not that the body is biased). The combination of Houston and Burr does not teach the limitations of claim 4. Accordingly, the rejections of claims 9 and 10 should be withdrawn for at least the same reason as for claim 4.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over figure 3 of Houston in view of figure 2 of Houston. Claim 11 is dependent on claim 4. Accordingly, the rejection of claim 11 should be withdrawn for at least the same reason for claim 4.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Houston in view of Inoue et al. (US 6,198,134). Claim 13, which is dependent on claim 4, states: "the substrate floats." Inoue et al. is introduced merely to teach a floating substrate. The combination of Houston and Inoue et al. does not teach the limitations of claim 4. Accordingly, the rejection of claim 13 should be withdrawn for at least the same reason as for claim 4.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Houston in view of Ng (US 4,763,183). Claim 14, which is dependent on claim 4, states: "the substrate is biased." Ng is introduced merely to teach a floating substrate. The combination of Houston and Ng does not teach the limitations of claim 4. Accordingly, the rejection of claim 14 should be withdrawn for at least the same reason as claim 4.

Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view

of Houston.

Claim 20 is amended to recite:

"a first electric field terminal region extending partially beneath the source and partially beneath the gate, and a second electrical field terminal region extending partially beneath the drain and partially beneath the gate" (Emphasis added.)

An example of this is shown in FIG. 8 of the application. Neither Hwang nor Houston teach this so the rejection of claim 20 should be withdrawn. Likewise, the rejection of dependent claims 21-23 should be withdrawn for at least this same reason.

It is believed that the application is in condition for allowance.

Respectfully submitted,

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